PATENT COOPERATION EATY

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JUN 1 2 1995

From the INTERNATIONAL SEARCHING AUTHORITY

To:

GENENTECH, INC.

GENENTECH, INC. LEGAL DEPT.

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

Attn. RAINES, Stephen 460 Point San Bruno Boulevard South San Francisco (PCT Rule 44.1) California 94080-4990 UNITED STATES OF AMERICA D7, 05, 95 Date of mailing (day/month/year) Applicant's or agent's file reference See paragraphs 1 and 4 below FOR FURTHER ACTION P0871P5 International filing date International application No. (day/month/year) 28/12/94 PCT/US 94/14553 Applicant GENENTECH, INC. et al. 1. X The applicant is hereby notified that the international search report has been established and is transmitted herewith. Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46): The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet. Where? To the International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Fascimile No.: (41-22) 740.14.35 For more detailed instructions, see the notes on the accompanying sheet. The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2; the applicant is notified that: the protest together with the decision thereon has been transmitted to the International Bureau together with the applicants's request to forward the texts of both the protest and the decision thereon to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made. The applicant is reminded of the following: 4.Further action(s): Shortly after 18 months from the priority date, the international application will be published by the International Bureau.

priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication. Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant

If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the

wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority

Fax: (+31-70) 340-3016

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

Authorized officer

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NOTES TO FORM PCT/ISA/220

These notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty and of the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international pbulication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

The claims only.

The description and the drawings may only be amended during international preliminary examination under Chapter II.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments wil be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confounded with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

NOTES TO FORM PCT/ISA/220 (continued)

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
 Claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- 3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]: "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 TO 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings which cannot be amended under Article 19(1).

The statement will be published with the international application and the amended claims.

The statement should be brief, it should not exceed 500 words if in English or if translated into English.

It should not be confouded with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It should not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

In what language?

The amendments must be made in the language in which the international application is published. The letter and any statement accompanying the amendments must be in the same language as the international application if that language is English of French; otherwise, it must be in English or French, at the choice of the applicant.

Consequence if a demand for international preliminary examination has already been filed?

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase?

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION EATY PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification o	f Transmittal of International Search Report 220) as well as, where applicable, item 5 below.				
P0871P5	ACTION					
International application No.	International filing date(day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/US 94/ 14553	28/12/94	03/01/94				
Applicant	Applicant					
GENENTECH, INC. et al.						
This international search report has been according to Article 18. A copy is being t	prepared by this International Searching Auth ransmitted to the International Bureau.	ority and is transmitted to the applicant				
This international search report consists of X It is also accompanied by a cop	of a total of 5 sheets. y of each prior art document cited in this repo	rL				
1. X Certain claims were found unsea	rchable (see Box I).					
2. Unity of invention is lacking (see	e Box II).					
The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing						
filed	filed with the international application.					
X furi	furnished by the applicant separately from the international application,					
	but not accompanied by a statement to the matter going beyond the disclosure in the	ne effect that it did not include e international application as filed.				
Тга	nscribed by this Authority					
4. With regard to the title, X the	text is approved as submitted by the applicant					
the	text has been established by this Authority to	read as follows:				
5. With regard to the abstract,						
1	text is approved as submitted by the applicant					
Box	text has been established, according to Rule 36 x III. The applicant may, within one month from the report, submit comments to this Authority	om the date of mailing of this international				
6. The figure of the drawings to be pub	lished with the abstract is:					
	suggested by the applicant.	\mathbf{X} None of the figures.				
bec	ause the applicant failed to suggest a figure.					
bec	ause this figure better characterizes the inventi	on.				





International application No.

PCT/US 94/ 14553

BOXI	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)		
This in	This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:		
1. X	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Remark: Although claim 37 is directed to a method of treatment of the human /animal body the search has been carried out and based on the alleged effects of the compound/composition.		
2.	Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:		
3	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).		
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)		
This Ir	nternational Searching Authority found multiple inventions in this international application, as follows:		
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all		
	searchable claims.		
2.	As all searchable claims could be searches without effort justifying an additional fee, this Authority did not invite payment of any additional fee.		
3.	As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:		
4.	No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:		
Remar	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.		

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 94/14553

A. CLASSI IPC 6	FICATION OF SUBJECT MATTER C12N15/19 C07K14/52 C07K16	/24 A61K38/19	
According to	o International Patent Classification (IPC) or to both national cla	ssification and IPC	
	SEARCHED		
Minimum do IPC 6	ocumentation searched (classification system followed by classifi $C07K$	cation symbols)	
Documentati	ion searched other than minimum documentation to the extent th	at such documents are included in the fields so	earched
Electronic da	ata base consulted during the international search (name of data	base and, where practical, search terms used)	
C. DOCUM	IENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of th	e relevant passages	Relevant to claim No.
X	EXPERIMENTAL HEMATOLOGY, vol. 16,no. 3, March 1988 pages 201-205, MCDONALD 'THROMBOPOETIN:ITS BIOLOGY,PURIFICATION,AND CHARAC see the whole document	TERIZATION'	1-5,12, 36-39
x	EXPERIMENTAL HEMATOLOGY, vol. 17,no. 8, September 1989 pages 865-871, MCDONALD ET AL 'A FOUR-STEP PR THE PURIFICATION OF THROMBOPOIE see the whole document	OCEDURE FOR	1-5,12, 36-39
		-/	
X Furt	ther documents are listed in the continuation of box C.	Patent family members are listed	in annex.
'A' docum consider filing 'L' docum which citatic 'O' docum other 'P' docum later '	Special categories of cited documents: A' document defining the general state of the art which is not considered to be of particular relevance E' earlier document but published on or after the international filing date C' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) C' document referring to an oral disclosure, use, exhibition or other means P' document published prior to the international filing date but later than the priority date claimed T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention Cannot be considered novel or cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. A' document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention Cannot be considered novel or cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. A' document member of the same patent family Date of the actual completion of the international search report		the deplication but theory underlying the calcimed invention of the considered to ocument is taken alone endemed invention endemed invention endemed invention the such document of the such document
	e actual completion of the international search 31 May 1995	Date of mailing of the international s	each report
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+ 31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+ 31-70) 340-3016	Authorized officer Sitch, W	

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International Application No
PCT/US 94/14553

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.			
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
THE JOURNAL OF LABORATORY AND CLINICAL MEDICINE, vol. 106,no. 2, August 1985 pages 162-174, MCDONALD ET AL 'STUDIES ON THE PURIFICATION OF THROMBOPOIETIN FROM KIDNEY CELL CULTURE MEDIUM' see the whole document	1-5,12, 36-39		
EXPERIMENTAL HEMATOLOGY, vol. 2,no. 6, 1974 pages 355-361, MCDONALD ET AL 'PURIFICATION AND ASSAY OF THROMBOPOIETIN' see the whole document	1-5,12, 36-39		
THE EMBO JOURNAL, vol. 12,no. 7, 1993 pages 2645-2653, SKODA ET AL 'MURINE C-MPL:A MEMBER OF THE HEMATOPOIETIC GROWTH FACTOR RECEPTOR SUPERFAMILY THAT TRANSDUCES A PROLIFERATIVE SIGNAL' cited in the application			
NATURE, vol. 369, 16 June 1994 pages 533-538, DE SAUVAGE ET AL 'STIMULATION OF MEGAKARYOCYTOPOIESIS AND THROMBOPOIESIS BY THE C-MPL LIGAND' see the whole document	1-40		
CELL, vol. 77, 1 July 1994 pages 1117-1124, BARTLEY ET AL 'IDENTIFICATION AND CLONING OF A MEGAKARYOCYTE GROWTH AND DEVELOPMENT FACTOR THAT IS A LIGAND FOR THE CYTOKINE RECEPTOR MPL' see the whole document	1-40		
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, USA, vol. 91, no. 26, 20 December 1994 pages 13023-13027, FOSTER ET AL 'HUMAN THROMBOPOIETIN:GENE STRUCTURE, CDNA SEQUENCE, EXPRESSION, AND CHROMOSOMAL LOCALIZATION' see the whole document	1-40		
	Clusion of document, with indication, where appropriate, of the relevant passages THE JOURNAL OF LABORATORY AND CLINICAL MEDICINE, vol. 106, no. 2, August 1985 pages 162-174, MCDONALD ET AL 'STUDIES ON THE PURIFICATION OF THROMBOPOIETIN FROM KIDNEY CELL CULTURE MEDIUM' see the whole document EXPERIMENTAL HEMATOLOGY, vol. 2, no. 6, 1974 pages 355-361, MCDONALD ET AL 'PURIFICATION AND ASSAY OF THROMBOPOIETIN' see the whole document THE EMBO JOURNAL, vol. 12, no. 7, 1993 pages 2645-2653, SKODA ET AL 'MURINE C-MPL:A MEMBER OF THE HEMATOPOIETIC GROWTH FACTOR RECEPTOR SUPERFAMILY THAT TRANSDUCES A PROLIFERATIVE SIGNAL' cited in the application NATURE, vol. 369, 16 June 1994 pages 533-538, DE SAUVAGE ET AL 'STIMULATION OF MEGAKARYOCYTOPOIESIS AND THROMBOPOIESIS BY THE C-MPL LIGAND' see the whole document CELL, vol. 77, 1 July 1994 pages 1117-1124, BARTLEY ET AL 'IDENTIFICATION AND CLONING OF A MEGAKARYOCYTE GROWTH AND DEVELOPMENT FACTOR THAT IS A LIGAND FOR THE CYTOKINE RECEPTOR MPL' see the whole document PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, USA, vol. 91, no. 26, 20 December 1994 pages 13023-13027, FOSTER ET AL 'HUMAN THROMBOPOIETIN:GENE STRUCTURE, CDNA SEQUENCE, EXPRESSION, AND CHROMOSOMAL LOCALIZATION' see the whole document		

International Application No
PCT/US 94/14553

Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	PU1/05 94/14553	
ategory *		Relevant to claim No.	
γ, χ	FEBS LETTERS, vol. 353,no. 1, 10 October 1994 pages 57-61, SOHMA ET AL 'MOLECULAR CLONING AND CHROMOSOMAL LOCALIZATION OF THE HUMAN THROMBOPOIETIN GENE' see the whole document	1-40	

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